

NOISE IMPACT ANALYSIS

Verizon Wireless
Site Name: "Monte Vista Buena Creek"
1329 Sugarbush Drive
Vista, County of San Diego, California 92084

Prepared For

Milestone Wireless
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Prepared By

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Job #B01003N1

November 22, 2010

SDC DPLU RCVD 09-05-12
ZAP00-142W²

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1.0 EXECUTIVE SUMMARY

The existing Verizon Wireless telecommunications facility, known as Monte Vista Buena Creek, currently consists of an unmanned telecommunications equipment room in the basement of an existing residence. Verizon proposes to add a new emergency generator to the site, to be located outside of the existing lease area. The project site is located at 1329 Sugarbush Drive in an unincorporated area of Vista, County of San Diego, California.

The purpose of this report is to assess noise impacts from the equipment at the existing and proposed Verizon facility, and to determine if additional mitigation is necessary and feasible to reduce project related property line noise impacts to less than significant. Noise limits specified within the County of San Diego Noise Ordinance must be met at neighboring property lines.

Based on the Verizon project information available, calculations show that as designed, the noise impacts from the unmanned operation of the Verizon facility will exceed County of San Diego property line noise limits at all surrounding property lines and at the on-site residence. Mitigation is required to bring these noise levels into compliance, and is detailed in Section 5.2.

2.0 INTRODUCTION

This acoustical analysis report is submitted to satisfy the noise requirements of the County of San Diego. Its purpose is to assess noise impacts from on-site project related mechanical noise sources, and to determine if the proposed mitigation will reduce the noise impacts to less than significant levels. This wireless equipment site has been associated with County of San Diego permit number ZAP 00-142 in the past, as referenced on as-built site plans in Appendix A.

All noise level or sound level values presented herein are expressed in terms of decibels (dB), with A-weighting, abbreviated "dBA," to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol " L_{EQ} ." Unless a different time period is specified, " L_{EQ} " is implied to mean a period of one hour. Some of the data may also be presented as octave-band-filtered and/or A-octave-band-filtered data, which are a series of sound spectra centered about each stated frequency, with half of the bandwidth above and half of the bandwidth below each stated frequency. This data is typically used for machinery noise analysis and barrier-effectiveness calculations.

Sound Pressure is the actual noise experienced by a human or registered by a sound level instrument. When Sound Pressure is used to describe a noise source, the distance from the noise source must be specified in order to provide complete information. Sound Power, on the other hand, is a specialized analytical method to provide information without the distance requirement, but it may be used to calculate the sound pressure at any desired distance.

2.1 Project Location

The subject property is located at 1329 Sugarbush Drive in an unincorporated area of Vista, County of San Diego, California. The Assessor's Parcel Number (APN) is 181-280-07. There is an existing residence on the lot. For a graphical representation of the site, please refer to the Vicinity Map, Assessor's Parcel Map, Satellite Aerial Photograph, and Topographic Map provided as Figures 1 through 4, respectively.

2.2 Project Description

The proposed project includes the installation of a 30 kW Kohler emergency backup generator at the existing wireless facility. The generator is proposed to be located outside of the existing lease area, mounted on a concrete pad within an eight-foot high covered enclosure. The generator is not expected to be operational except in the event of a power failure, although it will typically run for 15 minutes, once a week; during mid-day on a weekday, for test and maintenance purposes.

For additional project details and equipment positioning, please refer to the as-built site plans, dated May 15, 2001, provided in Appendix A, and the site lock-down sketch showing the proposed generator location, dated November 19, 2009, provided as Appendix B.

2.3 Applicable Noise Standards

The noise regulations applicable to this project are contained within the County of San Diego Municipal Code, which specifies noise limits based on the zoning designation of the properties in question. The subject property is zoned A70 (Limited Agricultural). Neighboring properties to the north, south, east, and west are all zoned A70 as well. Properties zoned A70 have noise limits of 50 dBA between the hours of 7 a.m. and 10 p.m. and 45 dBA between the hours of 10 p.m. and 7 a.m. Pertinent sections of the County of San Diego Noise Ordinance are provided as Appendix C.

3.0 ENVIRONMENTAL SETTING

3.1 Existing Noise Environment

The existing noise environment primarily consists of traffic noise from Buena Creek Road, with some noise from existing Verizon equipment. The existing Verizon equipment on site consists of an indoor equipment area, located in the basement of the existing on-site residence, which is serviced by two ground-mounted air conditioning units located to the north of the residence.

3.1.1 Ambient Noise Monitoring

An on-site inspection was conducted at 7:00 a.m. on Tuesday, November 16, 2010. The weather conditions were as follows: little to no measurable wind, moderate humidity, and temperatures in the mid 50's. An ambient noise measurement was taken near the proposed generator location for a duration of ten minutes. The microphone position was approximately five feet above the existing grade. The measured noise level can be seen in Table 1. Noise sources in the area primarily consisted of traffic noise from Buena Creek Road.

Table 1. On-Site Noise Measurement Conditions and Results	
Date	Tuesday, November 16, 2010
Time	7:10 a.m. – 7:20 a.m.
Conditions	Clear skies, little to no measurable wind, temperature in the mid 50's with moderate humidity
Measured Noise Level	57.2 dBA L _{EQ}

3.1.2 Existing Equipment Noise Sources

The existing Verizon equipment on site consists of an indoor equipment area, located in the basement of the existing on-site residence, that is serviced by two ground-mounted Carrier 38HDC060 air conditioning units, located to the north of the residence. As the air conditioning units were only turned on for a short period of time during the site visit, no noise measurements could be made for these units. Manufacturer noise information for these units was not found on the Carrier website; however, noise information for a similar unit, the Carrier 38HDR060, was used. Sound power levels provided by the manufacturer are shown in Table 2. Please refer to Appendix C: Manufacturer Data Sheets.

Table 2. Sound Power Level of Carrier 38HDR060 Air Conditioning Unit								
Source	Octave Frequency (Hz)							Total (dBA)
	125	250	500	1K	2K	4K	8K	
Carrier 38HDR060 Sound Power (dBA)	63.0	61.5	64.0	66.5	66.0	64.5	55.5	72.4

3.2 Future Noise Environment

The future noise environment in the vicinity of the project site will be primarily a result of the same noise sources, as well as the noise generated by the proposed equipment at the Verizon facility.

Noise levels for the Kohler 30 kW generator with and without the manufacturer-provided sound and weather enclosure were provided by Brian Glenn of Bay City Electric Works, an installation vendor for Verizon Wireless. Broadband frequency noise levels were given for the measurements which were taken at 23 feet from the generator. For this reason, octave band noise levels were approximated using noise measurements made of a Kohler 40 kW generator for a previous Eilar Associates acoustical report. The resultant estimated noise spectrums are shown below in Table 3. More information is provided in Appendix D: Manufacturer Data Sheets, and Appendix E: Pertinent Sections of Previous Eilar Associates Acoustical Report.

Table 3. Estimated Sound Pressure Level of Kohler 30 kW Generator, at 23 Feet from Source									
Source	Octave Frequency (Hz)								Total (dBA)
	63	125	250	500	1K	2K	4K	8K	
Generator Without Sound Enclosure	78.3	78.3	79.4	72.3	76.3	73.5	66.5	62.3	80.0
Generator With Sound Enclosure	63.6	63.6	64.7	57.6	61.7	58.8	51.8	47.1	65.4

4.0 METHODOLOGY AND EQUIPMENT

4.1 Methodology

4.1.1 Cadna Noise Modeling Software

Modeling of the outdoor noise environment is accomplished using Cadna Version 3.7, which is a model-based computer program developed by DataKustik for predicting noise impacts in a wide variety of conditions. Cadna (Computer Aided Noise Abatement) assists in the calculation, presentation, assessment, and mitigation of noise exposure. It allows for the input of project information such as noise source data, barriers, structures, and topography to create a detailed CAD model and uses the most up-to-date calculation standards to predict outdoor noise impacts.

4.1.2 Sound Insulation Prediction

Sound Transmission Class (STC) is a single number rating calculated in accordance with ASTM E413, using values of sound transmission loss. It provides an estimate of the sound performance of a partition, window, or door in sound insulation problems. Further information can be provided upon request.

Modeling of wall assemblies using building plan details is accomplished using INSUL Version 6.1, which is a model-based computer program, developed by Marshall Day Acoustics for predicting the sound insulation of walls, floors, ceilings and windows. It is acoustically based on theoretical models that require only minimal material information that can make reasonable estimates of the sound transmission loss (TL) and STC for use in sound insulation calculations. It models individual materials using the simple mass law and coincidence frequency approach and can model more complex assembly partitions as well. It has evolved over several versions into an easy to use tool and has refined the theoretical models by continued comparison with laboratory tests to provide acceptable accuracy for a wide range of constructions. INSUL model performance comparisons with laboratory test data show that the model generally predicts the performance of a given assembly within 3 STC points.

4.2 Measurement Equipment

Some or all of the following equipment was used at the site to measure existing ambient noise levels:

- Larson Davis Model 824, Type 1 Sound Level Meter, S/N 0343, with microphone & windscreen
- Larson Davis Model CA250, Type 1 Calibrator, S/N 2625
- Distance measurement wheel, digital camera

The sound level meter was field-calibrated immediately prior to the noise measurement and checked afterwards, to ensure accuracy. All sound level measurements conducted and presented in this report, in accordance with the regulations, were made with sound level meters that conform to the American National Standards Institute specifications for sound level meters (ANSI S1.4-1983, R2001). All instruments are maintained with National Bureau of Standards traceable calibration, per the manufacturers' standards.

Noise levels were calculated with the above mitigation measures in place, and results are shown below in Table 5. Figure 6 shows mitigated noise contours, and additional information is provided in Appendix H: Cadna Analysis Data and Results.

Table 5. Calculated Verizon Wireless Facility Noise Impact Levels With Mitigation				
Receiver Number	Description	Approximate Distance (feet)	Noise Limit (dBA)	Mitigated Noise Level (dBA)
R-1	North Property Line	200	45.0	29.9
R-2	South Property Line	175	45.0	32.0
R-3	East Property Line	47	45.0	43.9
R-4	West Property Line	146	45.0	33.6
R-5	On-Site Residence	58	45.0	44.5

As shown above, with the two mitigation measures implemented into the design, existing and proposed equipment noise levels are expected to be in compliance with County of San Diego noise limits at all surrounding property lines and the on-site residence.

6.0 CONCLUSION

As designed, the proposed Verizon Wireless equipment will not meet the applicable noise limits defined by the County of San Diego. With the manufacturer sound enclosure installed on the generator and appropriate door seals on the exterior door of the equipment shelter, noise levels are expected to comply with County of San Diego noise limits at all surrounding property lines and the on-site residence.

This analysis is based upon a current worst case scenario of anticipated, typical equipment for this type of wireless facility. Substitution of equipment with higher noise emission levels may invalidate the recommendations of this study. These conclusions and recommendations are based on the most up-to-date, project-related information available.

5.0 IMPACTS AND MITIGATION

5.1 Unmitigated Noise Impacts

Noise levels of the generator without the manufacturer sound enclosure were calculated using Cadna, assuming the STC rating of the proposed enclosure walls to be approximately STC 38, based on an evaluation of provided shelter details (see Appendix F) using the methodology described in Section 4.1.2. For more information, please refer to Appendix G: Sound Insulation Prediction Results. Exterior wall elements such as the proposed metal door and acoustical louver were also taken into account. Transmission loss data for the proposed acoustical louver was provided by the manufacturer and is provided in Appendix D. For purposes of a worst-case analysis, the metal door was evaluated without acoustical door seals. This analysis is considered to represent a worst-case scenario, as it does not take into account any shielding from existing or proposed structures, nor does it consider the effects of topography. Noise from existing air conditioning units was also taken into account. Results of this analysis are shown in Table 4 below. Unmitigated noise contours are also shown in Figure 5, and additional information can be found in Appendix H: Cadna Analysis Data and Results.

Table 4. Calculated Verizon Wireless Facility Noise Impact Levels Without Mitigation				
Receiver Number	Description	Approximate Distance (feet)	Noise Limit (dBA)	Unmitigated Noise Level (dBA)
R-1	North Property Line	200	45.0	45.3
R-2	South Property Line	175	45.0	46.8
R-3	East Property Line	47	45.0	60.6
R-4	West Property Line	146	45.0	48.4
R-5	On-Site Residence	58	45.0	57.6

As shown above, existing and proposed equipment noise levels at surrounding property lines and the on-site residence will exceed the applicable noise limits set by the County of San Diego without mitigation.

5.2 Mitigated Noise Impacts

In order to bring noise levels into compliance with applicable County of San Diego noise limits, the following mitigation measures must be implemented into the project design:


1. The generator must be equipped with the manufacturer sound enclosure.
2. The metal door providing access to the proposed equipment shelter must be equipped with appropriate acoustical seals. By equipping the door with all-around weather-tight seals and an airtight threshold closure at the bottom, a loss of up to 10 STC points can be prevented. Pemko and Reese are manufacturers of such products, and product data sheets are provided in Appendix D.

7.0 CERTIFICATION

This report is based on the related project information received and measured noise levels, and represents a true and factual analysis of the acoustical impact issues associated with the proposed addition to the existing Verizon Wireless site known as "Monte Vista Buena Creek," located at 1329 Sugarbush Drive in an unincorporated area of Vista, County of San Diego, California. This report was prepared by Amy Hool and Douglas Eilar.



Douglas K. Eilar,
Principal/Senior Acoustical Consultant

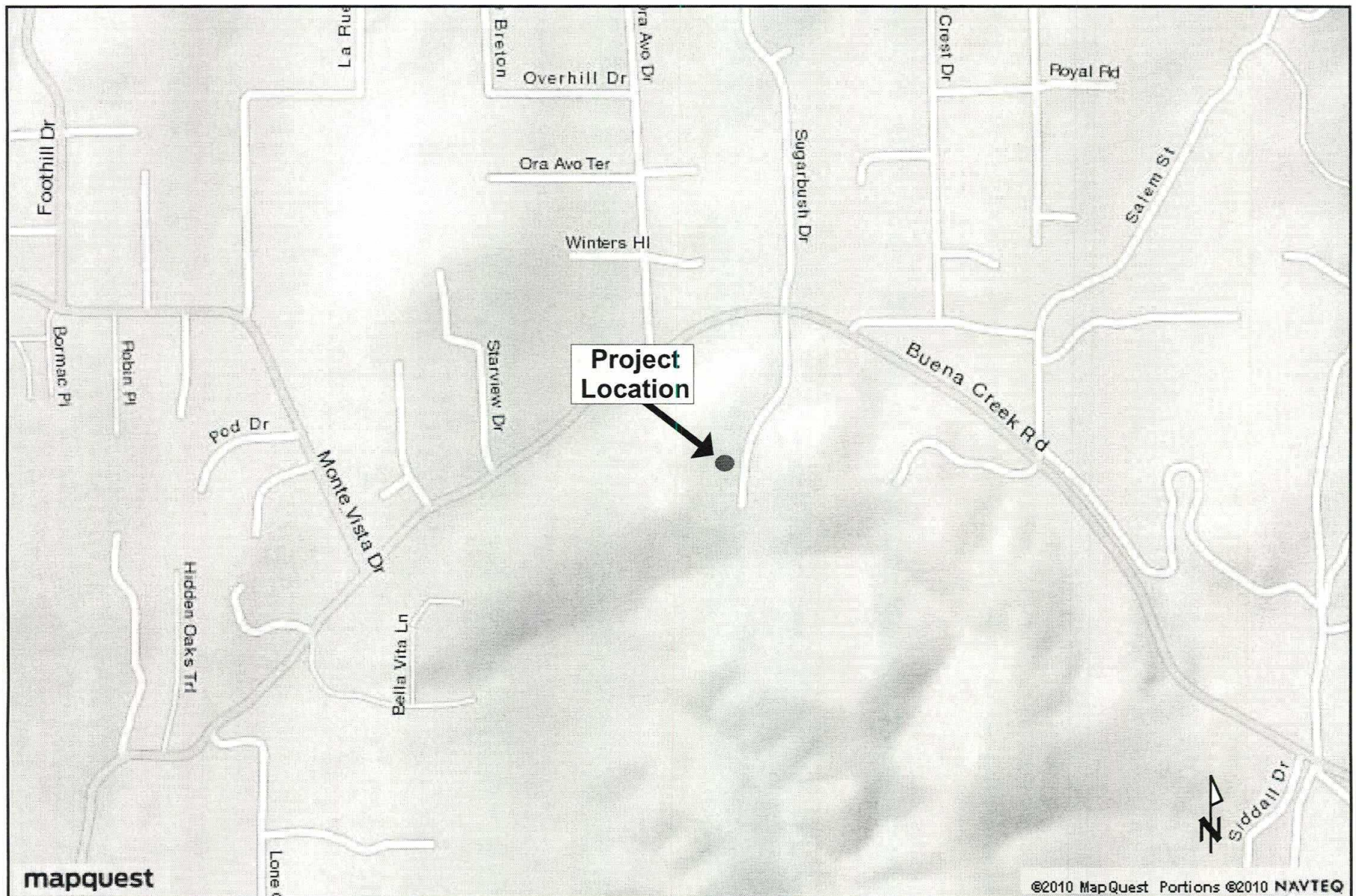


Amy Hool, Acoustical Consultant

8.0 REFERENCES

1. Beranek, Leo L., *Acoustical Measurements*, Published for the Acoustical Society of America by the American Institute of Physics, Revised Edition, 1988.
2. County of San Diego Noise Ordinance.
3. Harris, Cyril M., *Handbook of Acoustical Measurements and Noise Control*, Acoustical Society of America, 3rd Edition, 1998.
4. Harris, Cyril M., Ph.D., *Noise Control in Buildings*, Original Edition, 1994.
5. Hirschorn, Martin, *Noise Control Reference Handbook*, Revised Edition, 1989.
6. Irvine, Leland K. and Richards, Roy L., *Acoustics and Noise Control Handbook for Architects and Builders*, Original Edition, 1998.
7. Knudsen, Vern O. and Harris, Cyril M., *Acoustical Designing In Architecture*, American Institute of Physics for the Acoustical Society of America, 2nd Edition, 1978.
8. Raichel, Daniel R., *The Science and Applications of Acoustics*, American Institute of Physics Press for the Acoustical Society of America, 1st Edition, 2000.

FIGURES



mapquest

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Eilar Associates, Inc.
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Encinitas, California 92024
760-753-1865

Vicinity Map
Job #B01003N1

Figure 1



San Diego
County
Assessor's
Parcel Number:
181-280-07

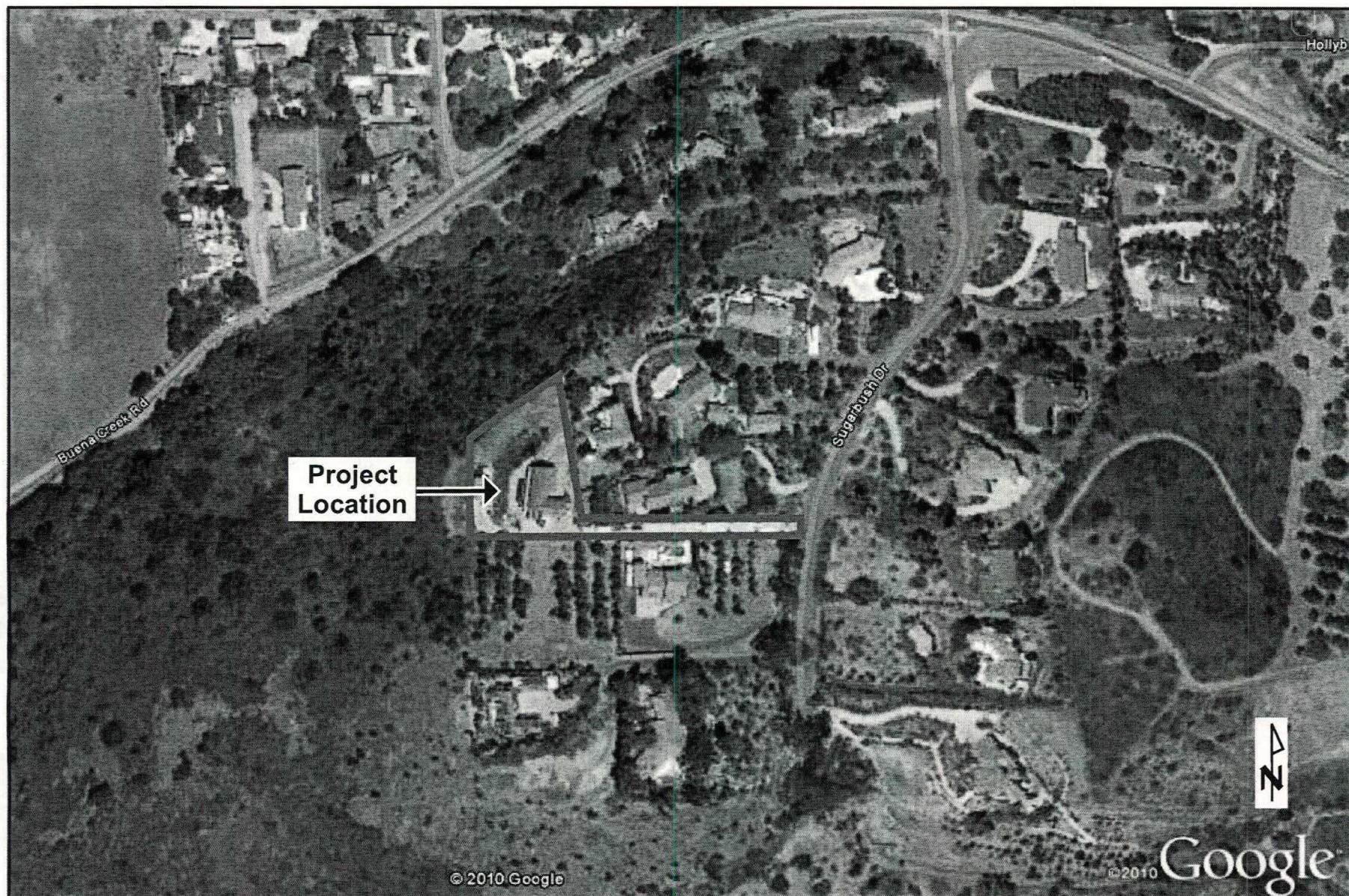


SanGIS

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Encinitas, California 92024
760-753-1865

Assessor's Parcel Map
Job # B01003N1

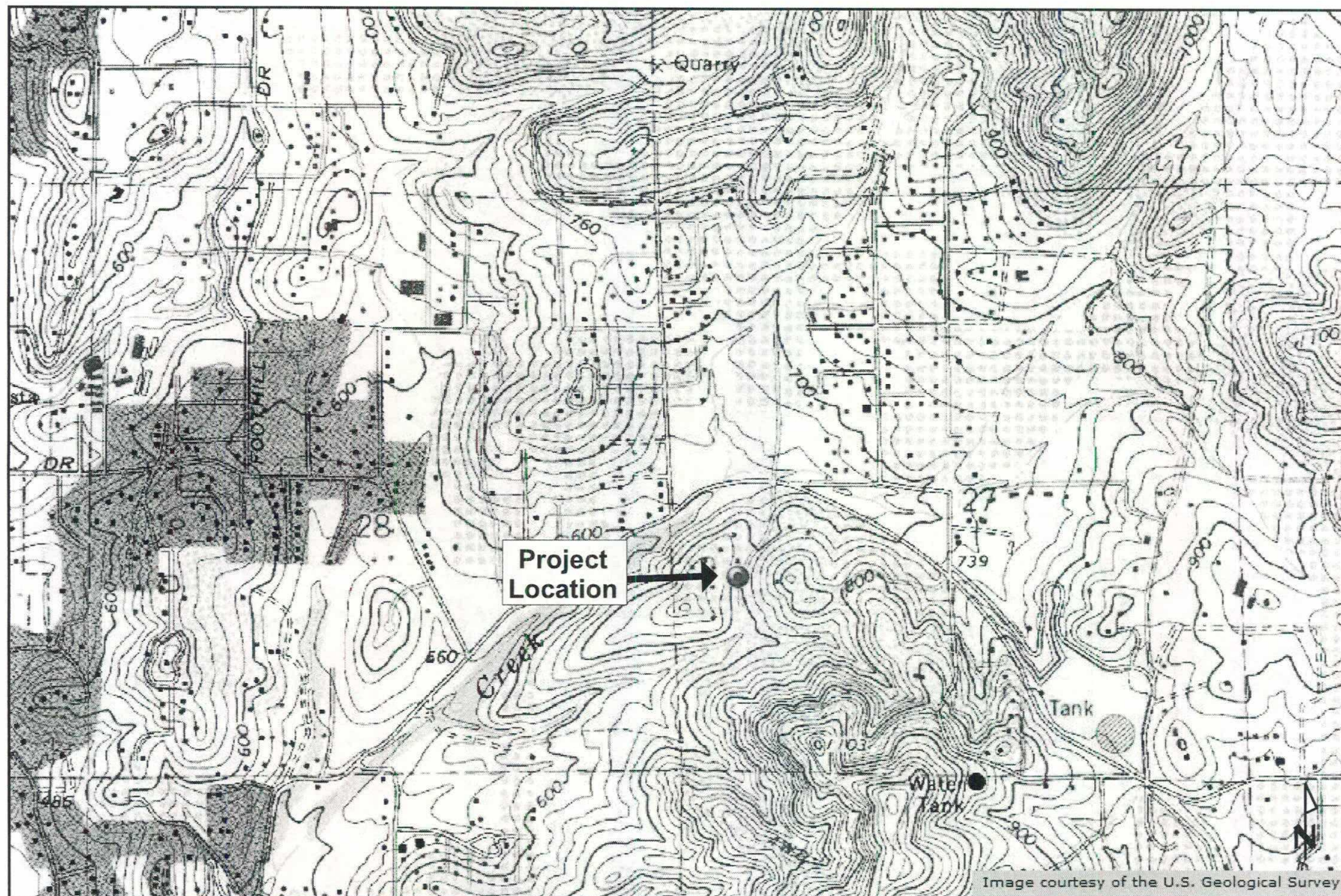
Figure 2



Eilar Associates, Inc.
539 Encinitas Boulevard, Suite 206
Encinitas, California 92024
760-753-1865

Satellite Aerial Photograph
Job # B01003N1

Figure 3

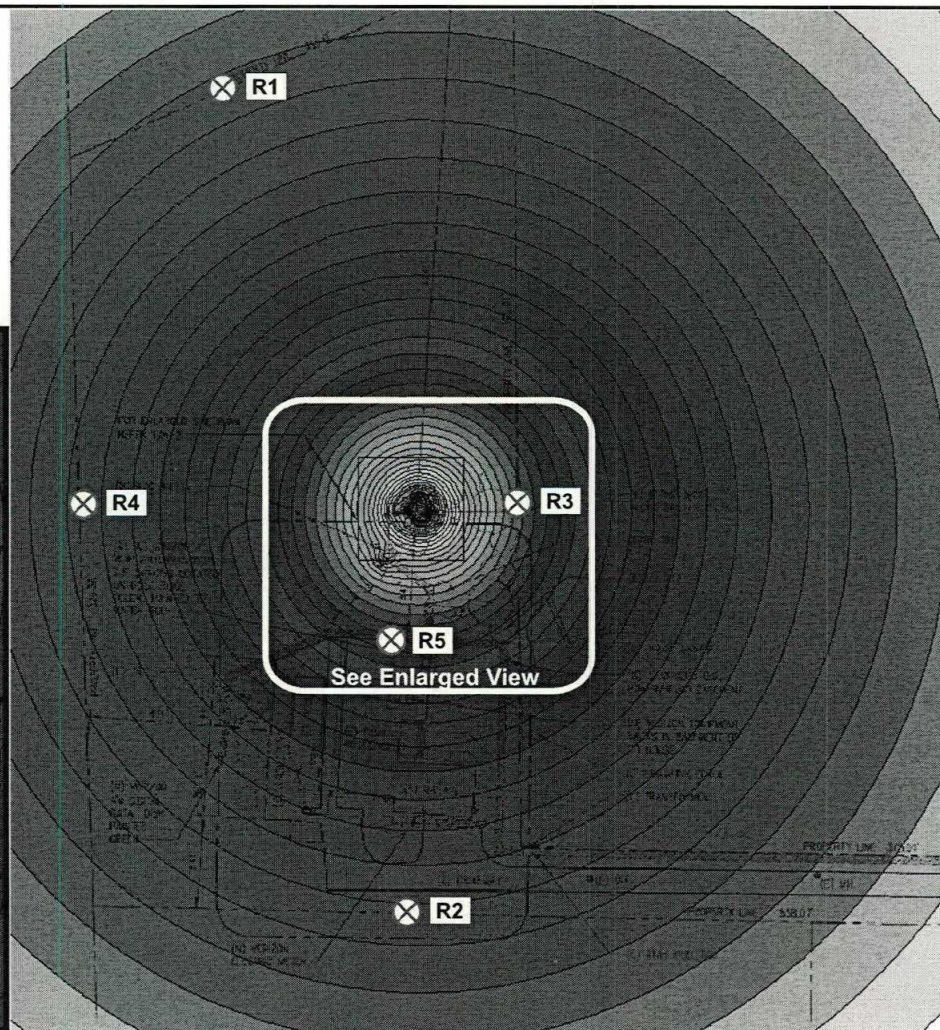
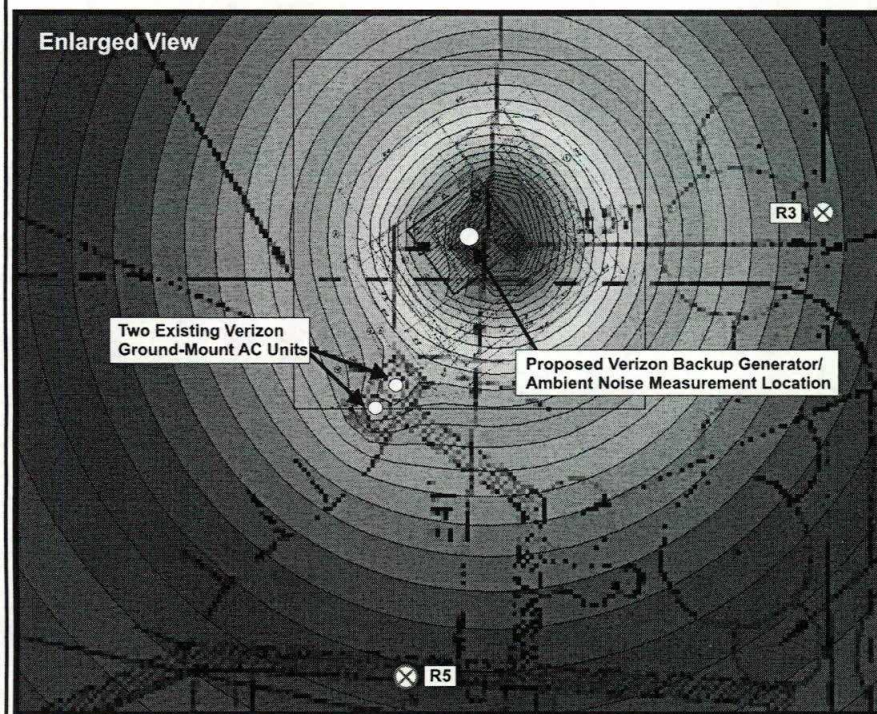
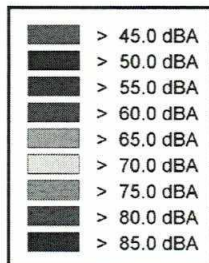


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Encinitas, California 92024
760-753-1865

Topographic Map
Job # B01003N1

Figure 4

Unmitigated Equipment Noise Levels at Surrounding Receivers	
Receiver Number	Unmitigated Noise Level (dBA)
R-1	45.3
R-2	46.8
R-3	60.6
R-4	48.4
R-5	57.6



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Encinitas, California 92024
760-753-1865

Site Plan Showing Unmitigated Noise Contours and Receiver Locations
Job # B01003N1

Figure 5

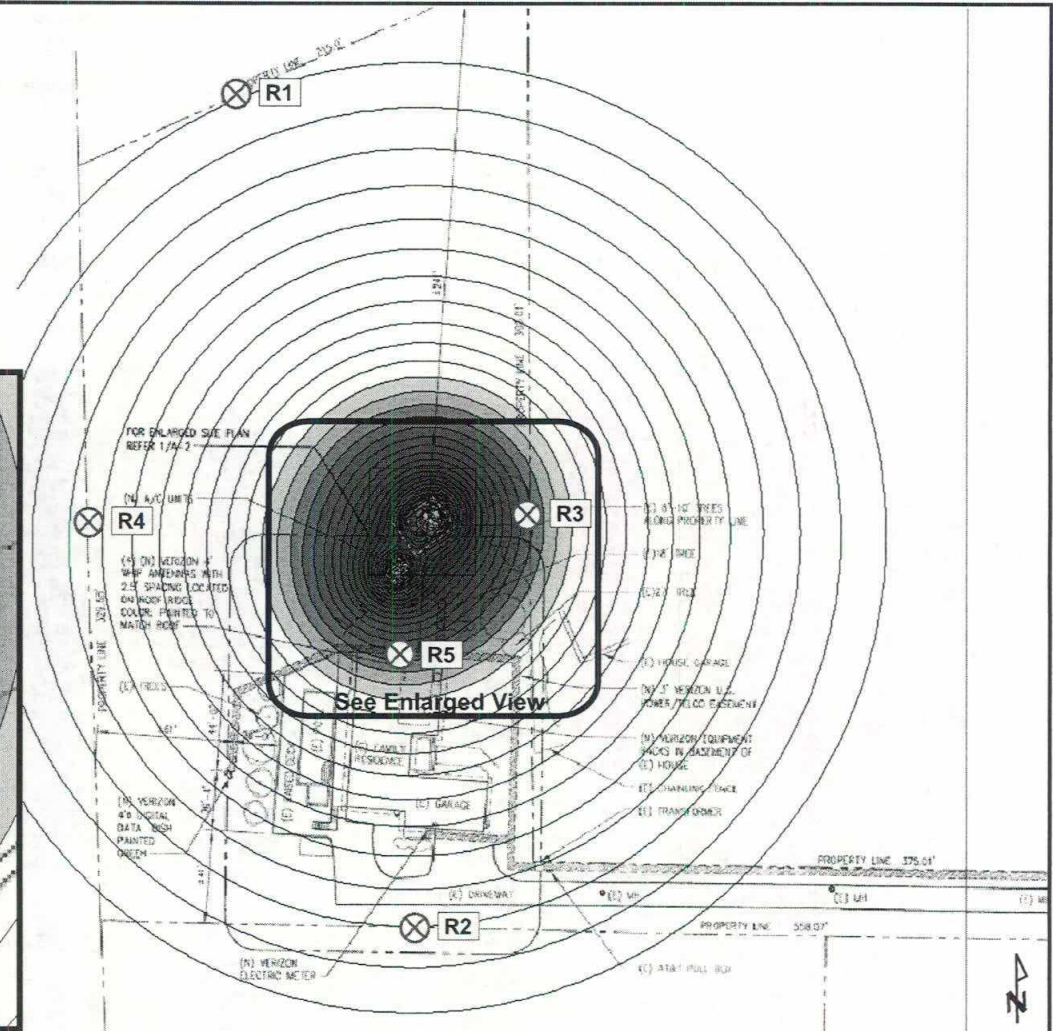
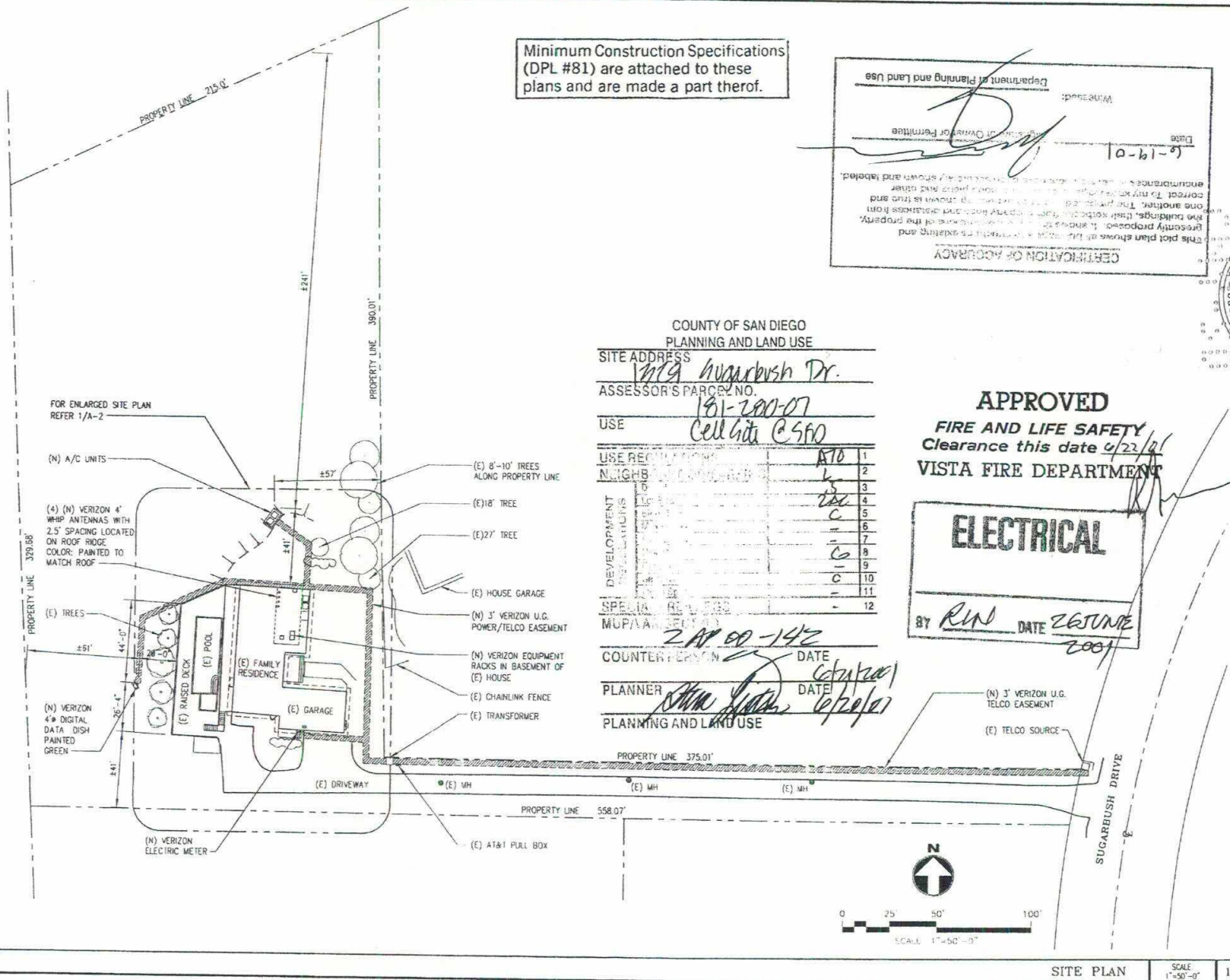


Figure 6

APPENDIX A

As-Built Site Plans, Dated May 15, 2001



DEPT. APPROVED DATE
 DATE
 NAME
 TITLE

REGISTERED PROFESSIONAL ENGINEER
 No. 58283
 State of California
 License No. 58283
 State of California
 License No. 58283

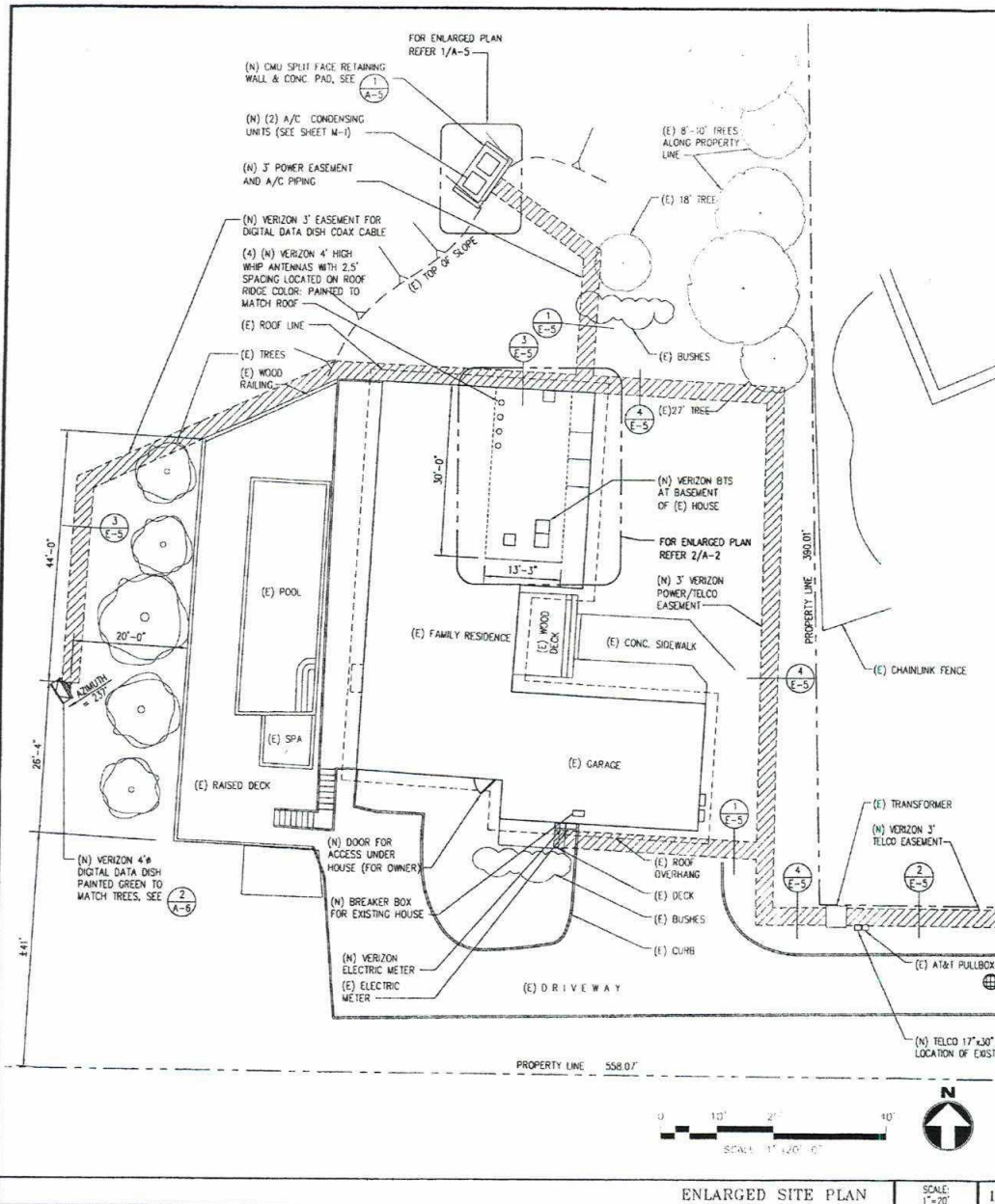
verizon wireless

MONTE VISTA/BUENA CREEK
 1325 SUGARBUSH DRIVE
 VISTA, CA 92084

CONSTRUCTION DRAWING
 SITE PLAN

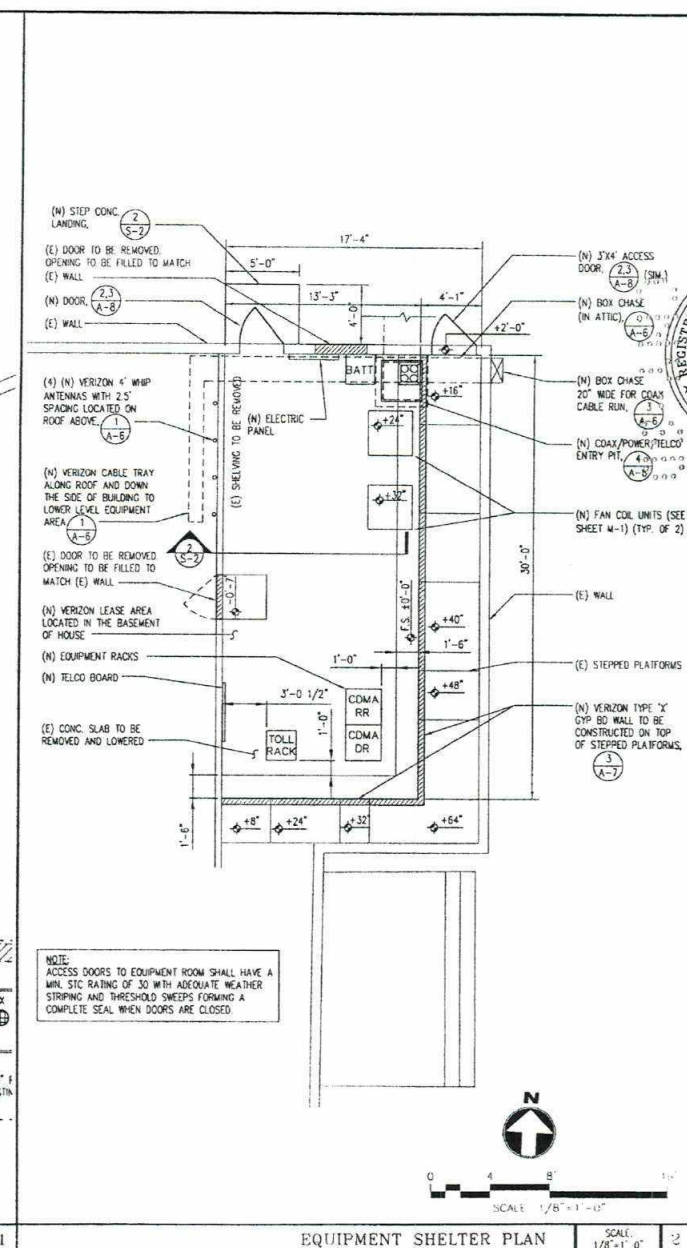
A-1

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ENLARGED SITE PLAN

SCALE: 1" = 20'



NOTE:
ACCESS DOORS TO EQUIPMENT ROOM SHALL HAVE A MIN. SIC RATING OF 30 WITH ADEQUATE WEATHER STRIPING AND THRESHOLD SWEEPS FORMING A COMPLETE SEAL WHEN DOORS ARE CLOSED.

EQUIPMENT SHELTER PLAN

SCALE: 1" = 8'

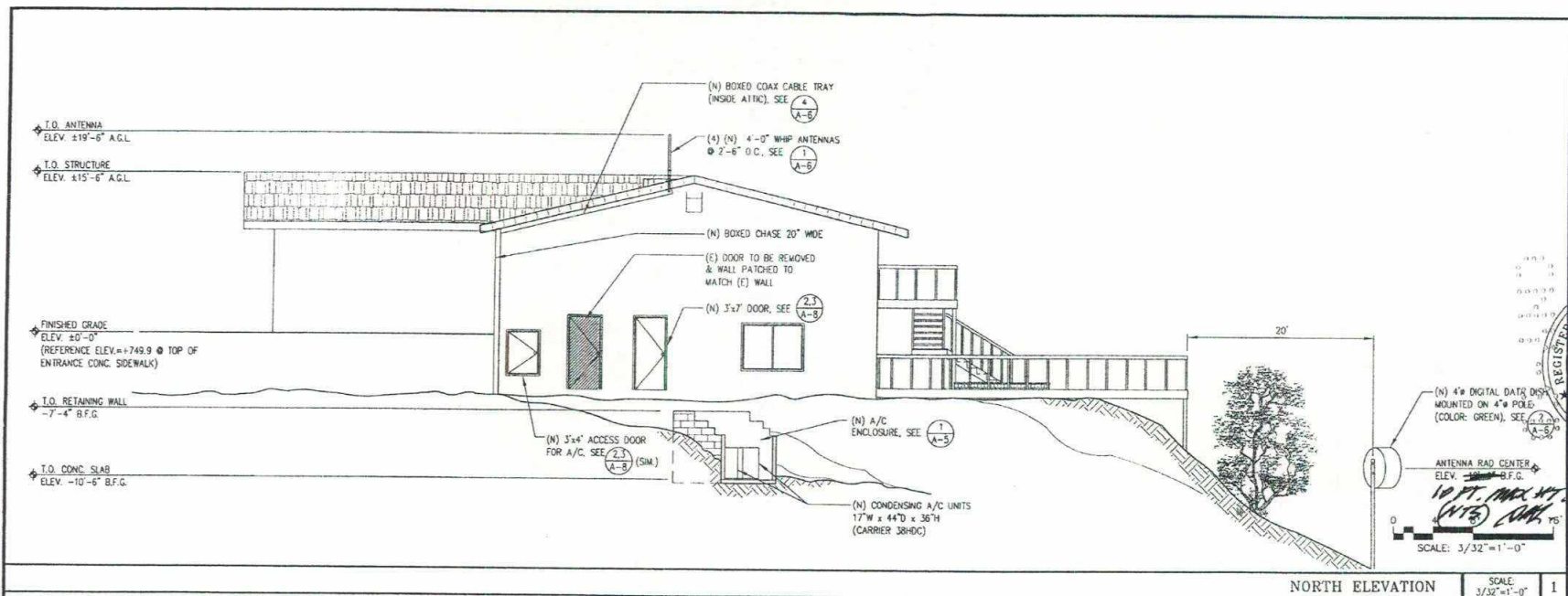
DEPT. APPROVED DATE	
A/E	
CW	
SL	
LU	
RF	(LU)

REGISTERED PROFESSIONAL ENGINEER
No. 59263
03/26/02
STATE OF CALIFORNIA
verizon wireless
1335 WILSON AVENUE, SUITE 300
SAN DIEGO, CA 92101

MONTE VISTA/BUENA CREEK
1335 WILSON AVENUE
SUITE 300
SAN DIEGO, CA 92101
CONSTRUCTION DRAWING
ENLARGED SITE PLANS

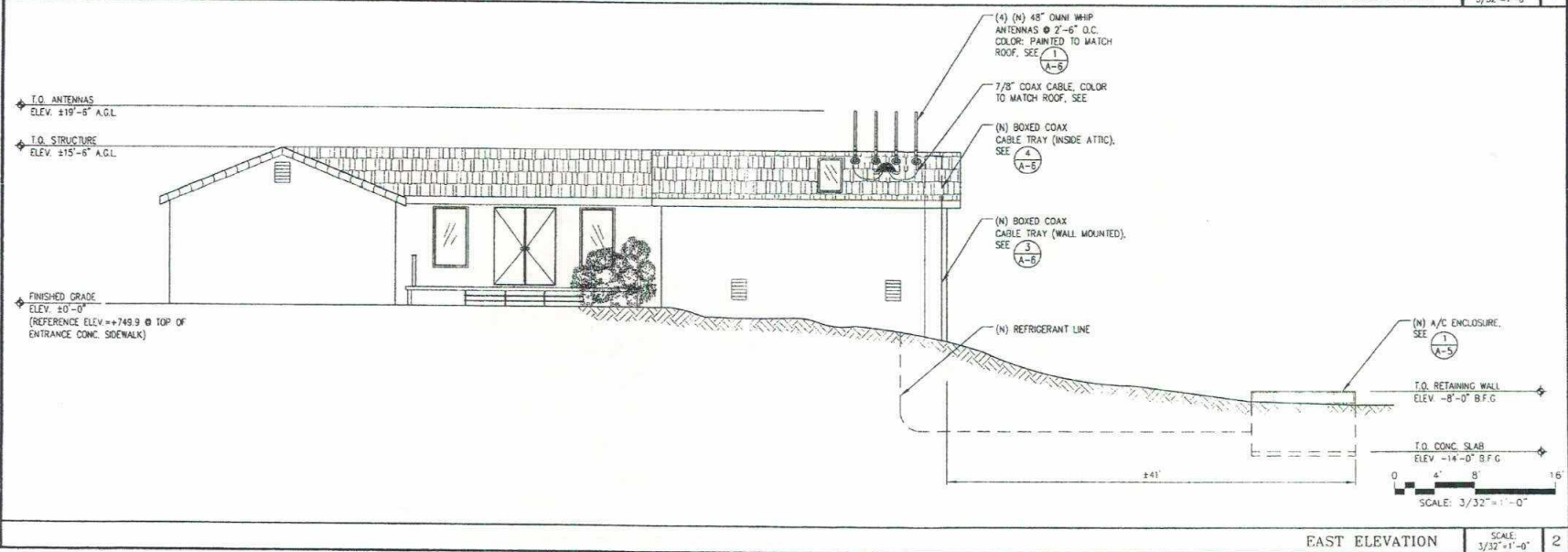
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A-2

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NORTH ELEVATION

SCALE: 3/32"=1'-0" 1



EAST ELEVATION

SCALE: 3/32"=1'-0" 2

DEPT. APPROVED DATE	
A/E	
C/M	
SA	
LU	
RF (LU)	

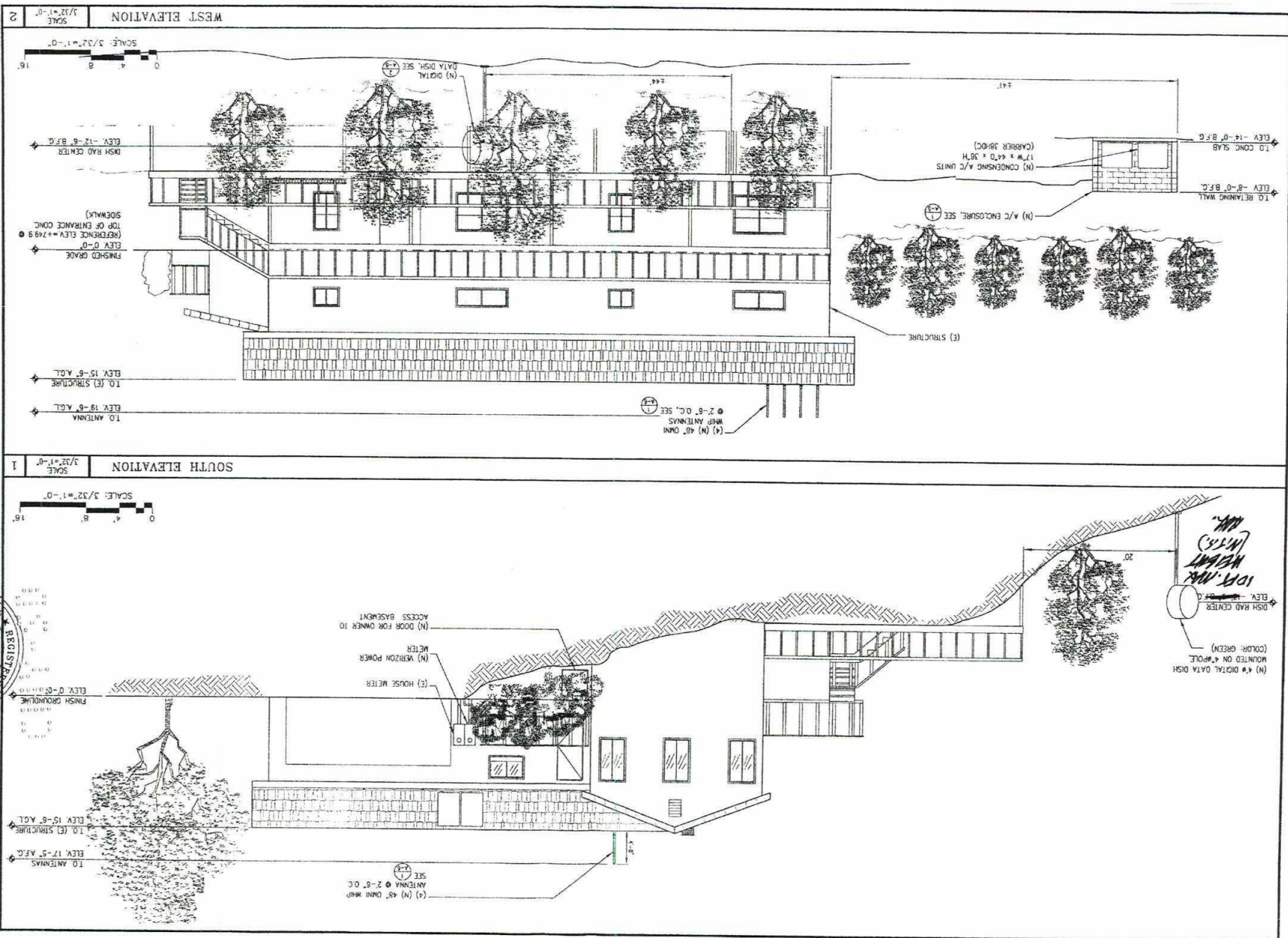
JM
Consulting Group, Inc.
Professional Engineer
No. 38363
Exp. 07/02
700 E. CALIFORNIA
SUITE 500
SAN ANTONIO, TX 78202

verizon wireless
1320 BUENA VISTA DRIVE
VISTA, CA 92081

MONTE VISTA/BUENA CREEK
CONSTRUCTION DRAWING
NORTH & EAST ELEVATIONS

REVISIONS
BY: J.F.MCD
DATE: 06/11/2001
NO. 1
Sheet

A-3



ISSUED DATE: 05/13/2011	
ISSUED FOR: CD	
REVISIONS:	DRAWN BY: R. FINNICK

MONTE VISTA/BUENA CREEK
1329 SOUTHWEST DRIVE
VISTA, CA 92084

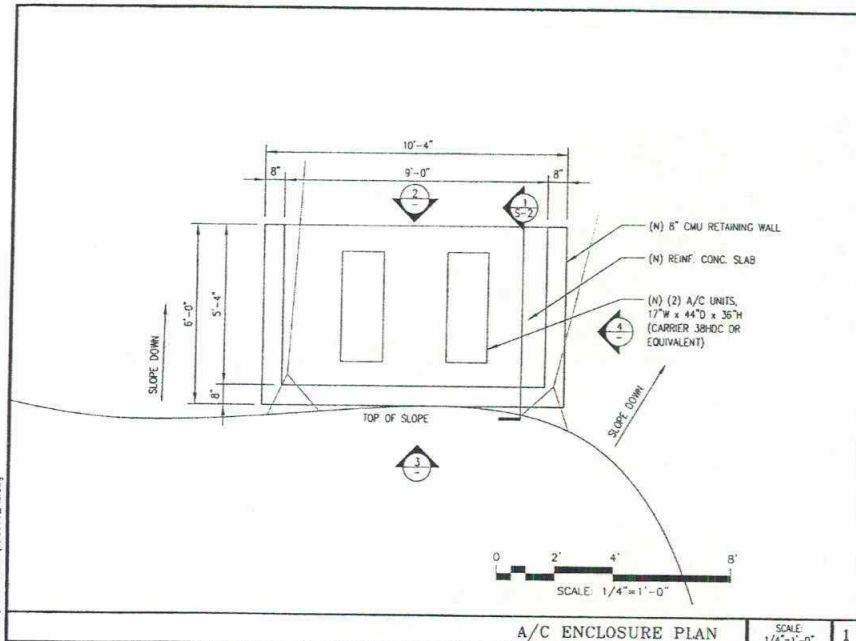
CONSTRUCTION DRAWING
SOUTH & WEST ELEVATIONS

5154 W. 5200th St. Suite 500
Minnetonka, MN 55343

Engineering Consultant
JM
 Consulting Group, Inc.
 PROJECTS & DIVISION
 10000 15th St.
 Suite 1000
 San Diego, CA 92161-1000

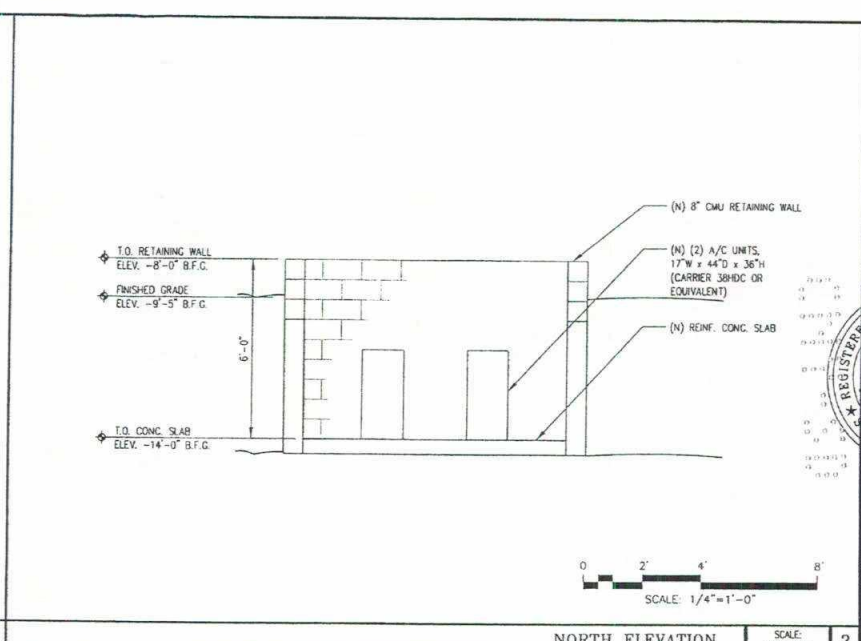
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RF (LU)	

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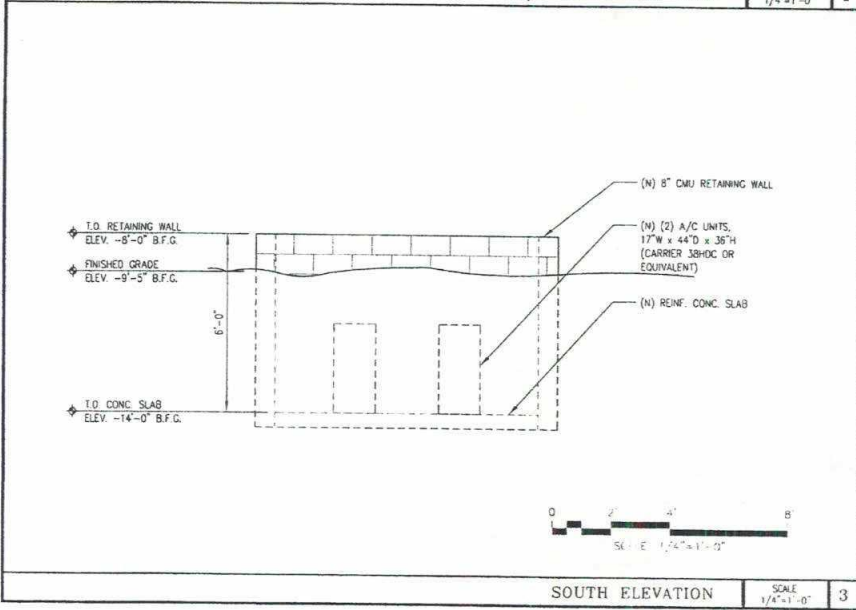
A/C ENCLOSURE PLAN

SCALE: 1/4"=1'-0" 1



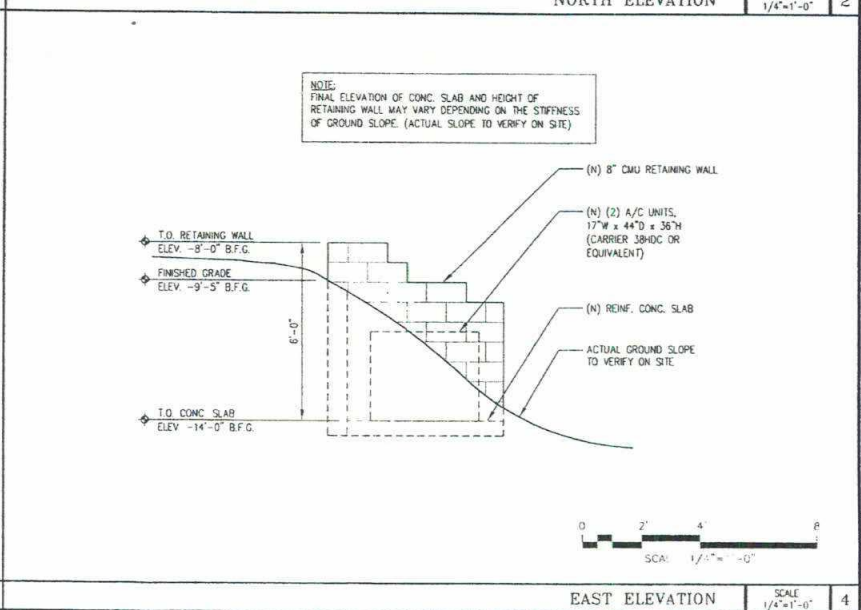
NORTH ELEVATION

SCALE: 1/4"=1'-0" 2



SOUTH ELEVATION

SCALE: 1/4"=1'-0" 3



EAST ELEVATION

SCALE: 1/4"=1'-0" 4

NOTE:
FINAL ELEVATION OF CONC. SLAB AND HEIGHT OF RETAINING WALL MAY VARY DEPENDING ON THE STIFFNESS OF GROUND SLOPE. (ACTUAL SLOPE TO VERIFY ON SITE)

DEPT. APPROVED DATE	
A/E	
CM	
SA	
LU	
RF (LU)	

verizon wireless

1000 MOUNTAIN VIEW BLVD. SUITE 500
SAN ANTONIO, TX 78201

MONTE VISTA/BUENA CREEK
1378 BLOOMINGDALE BLVD
VISTA, CA 92081

CONSTRUCTION DRAWING
A/C ENCLOSURE

DESIGN DATE: 06/07/2001	DESIGNED BY: JMW
CHECKED BY: JMW	DATE: 06/07/2001
Sheet	

A-5

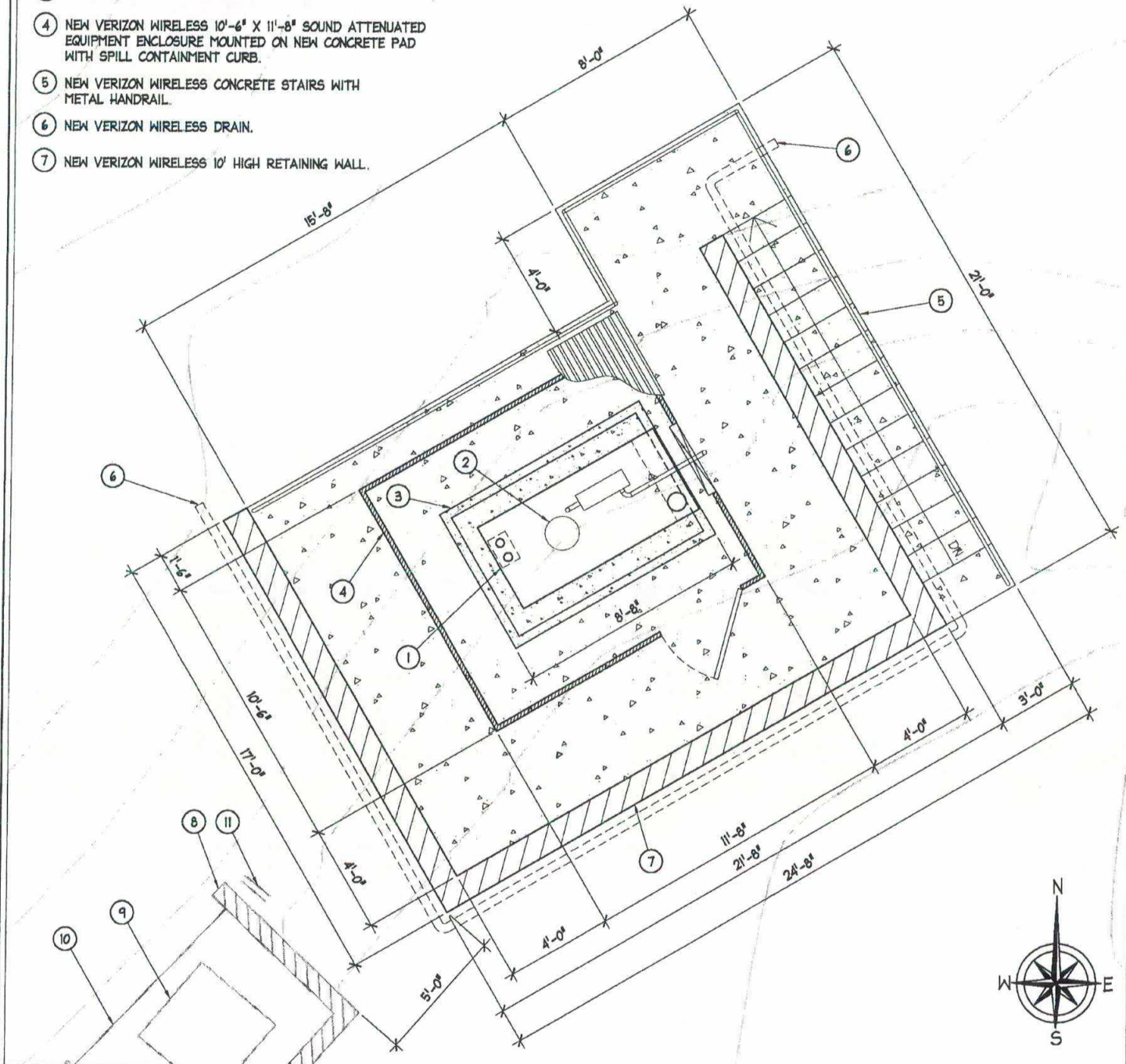
APPENDIX B

Site Lock-Down Sketch, Dated November 19, 2009

NOTES:

- ① NEW VERIZON WIRELESS 30 KW KOHLER EMERGENCY BACKUP GENERATOR WITH A 150 GALLON DIESEL FUEL TANK, MOUNTED INSIDE A NEW VERIZON WIRELESS 10'-6" X 11'-8" GENERATOR ENCLOSURE LOCATED OUTSIDE EXISTING VERIZON WIRELESS LEASE AREA.
- ② NEW VERIZON WIRELESS FIRE SUPPRESSION CANISTER MOUNTED ON NEW PURLIN (SHOWN DASHED).
- ③ NEW VERIZON WIRELESS 5'-10" X 8'-8" SPILL CONTAINMENT CURB.
- ④ NEW VERIZON WIRELESS 10'-6" X 11'-8" SOUND ATTENUATED EQUIPMENT ENCLOSURE MOUNTED ON NEW CONCRETE PAD WITH SPILL CONTAINMENT CURB.
- ⑤ NEW VERIZON WIRELESS CONCRETE STAIRS WITH METAL HANDRAIL.
- ⑥ NEW VERIZON WIRELESS DRAIN.
- ⑦ NEW VERIZON WIRELESS 10' HIGH RETAINING WALL.
- ⑧ EXISTING RETAINING WALL.
- ⑨ EXISTING A/C UNITS.
- ⑩ EXISTING CONC. PAD.
- ⑪ EXISTING DRAIN.

TOTAL SQ. FT. OF GENERATOR
LEASE AREA: 451.3 SQ. FT.



ACO
ARCHITECTS - INC.

26170 ENTERPRISE WAY #600
LAKE FOREST, CALIFORNIA 92630
Office: (949) 716-9940
Fax: (949) 297-4788

SITE: MONTE VISTA BUENA CREEK

SITE ADDRESS:
1329 SUGARBUSH
VISTA, CA 92084

DATE: 11/19/09

SCALE: 3/16"=1'-0"

PLAN: EXHIBIT A - BARNMASTER ENCLOSURE

SITE ACQUISITION SPECIALIST:
MILESTONE WIRELESS-EMANUEL HIGGINS
(323) 241-8519

PAGES: PAGE 1 OF 2

REV: 0

LOCK DOWN SKETCH

APPENDIX C

Pertinent Sections of the County of San Diego Noise Ordinance

SEC. 36.403. SOUND LEVEL MEASUREMENT.

(a) A sound level measurement made pursuant to this chapter shall be measured with a sound level meter using A-weighting and a "slow" response time, as these terms are used in ANSI S1.1-1994 or its latest revision.

(b) Each measurement shall be conducted at the boundary line of the property on which the noise source is located or any place on the affected property, but no closer than five feet from the noise source.

(c) The sound level meter shall be calibrated and adjusted by means of an acoustical calibrator of the coupler-type to assure meter accuracy within the tolerances in the ANSI specifications for sound level meters, ANSI S1.4-1983 or its latest revision. The sound level meter shall be used as provided in the manufacturer's instructions.

(Amended by Ord. No. 9962 (N.S.), effective 1-9-09)

SEC. 36.404. GENERAL SOUND LEVEL LIMITS.

(a) Except as provided in section 36.409 of this chapter, it shall be unlawful for any person to cause or allow the creation of any noise, which exceeds the one-hour average sound level limits in Table 36.404 when the one-hour average sound level is measured at the property line of the property on which the noise is produced or at any location on a property that is receiving the noise.

TABLE 36.404
SOUND LEVEL LIMITS IN DECIBELS (dBA)

ZONE	TIME	ONE-HOUR AVERAGE SOUND LEVEL LIMITS (dBA)
(1) RS, RD, RR, RMH, A70, A72, S80, S81, S87, S90, S92, RV, and RU with a density of less than 11 dwelling units per acre.	7 a.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	45
(2) RRO, RC, RM, S86, V5, RV and RU with a density of 11 or more dwelling units per acre.	7 a.m. to 10 p.m.	55
	10 p.m. to 7 a.m.	50
(3) S94, V4, and all commercial zones.	7 a.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	55
(4) V1, V2	7 a.m. to 7 p.m.	60
V1, V2	7 p.m. to 10 p.m.	55
V1	10 p.m. to 7 a.m.	55
V2	10 p.m. to 7 a.m.	50
V3	7 a.m. to 10 p.m.	70
	10 p.m. to 7 a.m.	65
(5) M50, M52, and M54	Anytime	70
(6) S82, M56, and M58.	Anytime	75
(7) S88 (see subsection (c) below)		

(b) Where a noise study has been conducted and the noise mitigation measures recommended by that study have been made conditions of approval of a Major Use Permit, which authorizes the noise-generating use or activity and the decision making body approving the Major Use Permit determined that those mitigation measures reduce potential noise impacts to a level below significance, implementation and compliance with those noise mitigation measures shall constitute compliance with subsection (a) above.

(c) S88 zones are Specific Planning Areas which allow different uses. The sound level limits in Table 36.404 above that apply in an S88 zone depend on the use being made of the property. The limits in Table 36.404, subsection (1) apply to property with a residential, agricultural or civic use. The limits in subsection (3) apply to property with a commercial use. The limits in subsection (5) apply to property with an industrial use that would only be allowed in an M50, M52 or M54 zone. The limits in subsection (6) apply to all property with an extractive use or a use that would only be allowed in an M56 or M58 zone.

(d) If the measured ambient noise level exceeds the applicable limit in Table 36.404, the allowable one-hour average sound level shall be the one-hour average ambient noise level, plus three decibels. The ambient noise level shall be measured when the alleged noise violation source is not operating.

(e) The sound level limit at a location on a boundary between two zones is the arithmetic mean of the respective limits for the two zones. The one-hour average sound level limit applicable to extractive industries, however, including but not limited to borrow pits and mines, shall be 75 decibels at the property line regardless of the zone in which the extractive industry is located.

(f) A fixed-location public utility distribution or transmission facility located on or adjacent to a property line shall be subject to the sound level limits of this section measured at or beyond six feet from the boundary of the easement upon which the facility is located.

(Amended by Ord. No. 7094 (N.S.), effective 3-25-86; amended by Ord. No. 9478 (N.S.), effective 7-19-02; amended by Ord. No. 9621 (N.S.), effective 1-9-04; amended by Ord. No. 9962 (N.S.), effective 1-9-09)

SEC. 36.405. REPAIRING, REBUILDING OR TESTING MOTOR VEHICLES.

It shall be unlawful for any person to repair, rebuild or test any motor vehicle in such a manner as to cause a disturbing, excessive or offensive noise as defined in section 36.402 of this chapter.

(Amended by Ord. No. 9962 (N.S.), effective 1-9-09)

SEC. 36.406. POWERED MODEL VEHICLES.

It shall be unlawful for any person to operate a powered model vehicle between 9 p.m. and 7 a.m. A powered model vehicle operated in a County park shall meet the daytime sound level standards for an RS zone measured at a point 100 feet from the park property line or 100 feet from where the model vehicle is being operated, whichever is less.

(Amended by Ord. No. 9962 (N.S.), effective 1-9-09)

SEC. 36.407. REFUSE VEHICLES & PARKING LOT SWEEPERS.

No person shall operate or allow to be operated, a refuse compacting, processing, or collection vehicle or a parking lot sweeper between the hours of 10 p.m. to 6 a.m., in or within 100 feet of a residential zone.

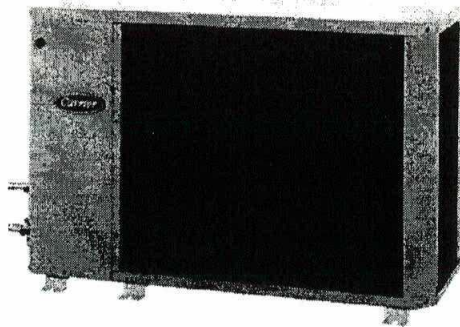
(Amended by Ord. No. 7428 (N.S.), effective 2-4-88; amended by Ord. No. 9962 (N.S.), effective 1-9-09)

APPENDIX D
Manufacturer Data Sheets

**38HDR
Performance™ Series Air Conditioner
with Puron® Refrigerant
1-1/2 to 5 Nominal Tons**



Product Data



Performance
SERIES

Carrier's Air Conditioners with Puron® refrigerant provide a collection of features unmatched by any other family of equipment. The 38HDR has been designed utilizing Carrier's Puron refrigerant. The environmentally sound refrigerant allows you to make a responsible decision in the protection of the earth's ozone layer.

As an Energy Star® Partner, Carrier Corporation has determined that this product meets the Energy Star® guidelines for energy efficiency. Refer to the combination ratings in the Product Data for system combinations that meet Energy Star® guidelines.

NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.

INDUSTRY LEADING FEATURES / BENEFITS

Energy Efficiency

- 13 - 15 SEER/10.9 - 12.5 EER

Sound

- Levels as low as 68 dBA

Design Features

- New aesthetics
- Small footprint, same as old model and "stackable"
- WeatherArmor™ cabinet
 - All steel cabinet construction
 - Baked on powder paint
 - Mesh coil guard

Reliability, Quality and Toughness

- Scroll compressor
- Crankcase Heater standard on sizes 030-060
- Factory-supplied filter drier
- High pressure switch
- Low pressure switch
- Line lengths up to 250' (76.2 m)
- Low ambient operation (down to -20°F/-28.9°C) with low ambient accessories.

ELECTRICAL DATA

38HDR UNIT SIZE	V-PH-Hz	VOLTAGE RANGE*		COMPRESSOR		OUTDOOR FAN MOTOR			MIN CKT AMPS	FUSE/CKT BKR AMPS
		Min	Max	RLA	LRA	FLA	NEC Hp	kW Out		
018-31	208/230-1-60	187	253	9.0	48.0	0.8	0.125	0.09	12.1	20
024-32	208/230-1-60	187	253	13.5	58.3	0.8	0.125	0.09	17.7	25
030-31	208/230-1-60	187	253	14.1	73.0	1.5	0.250	0.19	19.1	30
036-31	208/230-1-60	187	253	14.1	77.0	1.5	0.250	0.19	19.1	30
	208/230-3-60	187	253	9.2	71.0	1.5	0.250	0.19	13.0	20
	460-3-60	414	506	5.6	38.0	0.8	0.250	0.19	7.9	10
048-32	208/230-1-60	187	253	19.9	109.0	1.5	0.250	0.19	26.4	40
	208/230-3-60	187	253	13.1	83.1	1.5	0.250	0.19	17.9	25
	460-3-60	414	506	6.1	41.0	0.8	0.250	0.19	8.4	15
060-32	208/230-1-60	187	253	26.4	134.0	1.5	0.250	0.19	34.5	60
	208/230-3-60	187	253	16.0	110.0	1.5	0.250	0.19	21.5	30
	460-3-60	414	506	7.8	52.0	0.8	0.250	0.19	10.6	15

* Permissible limits of the voltage range at which the unit will operate satisfactorily

FLA - Full Load Amps

HACR - Heating, Air Conditioning, Refrigeration

LRA - Locked Rotor Amps

NEC - National Electrical Code

RLA - Rated Load Amps (compressor)

NOTE: Control circuit is 24-V on all units and requires external power source. Copper wire must be used from service disconnect to unit. All motors/compressors contain internal overload protection.

Complies with 2007 requirements of ASHRAE Standards 90.1

38HDR

A-WEIGHTED SOUND POWER (dBA)

Unit Size	Standard Rating (dBA)	Typical Octave Band Spectrum (dBA) (without tone adjustment)						
		125	250	500	1000	2000	4000	8000
018-31	68	52.0	57.5	60.5	63.5	60.5	57.5	46.5
024-32	69	57.5	61.5	63.0	61.0	60.0	56.0	45.0
030-31	72	56.5	63.0	65.0	66.0	64.0	62.5	57.0
036-31	72	65.0	61.5	63.5	65.0	64.5	61.0	54.5
048-32	72	58.5	61.0	64.0	67.5	66.0	64.0	57.0
060-32	72	63.0	61.5	64.0	66.5	66.0	64.5	55.5

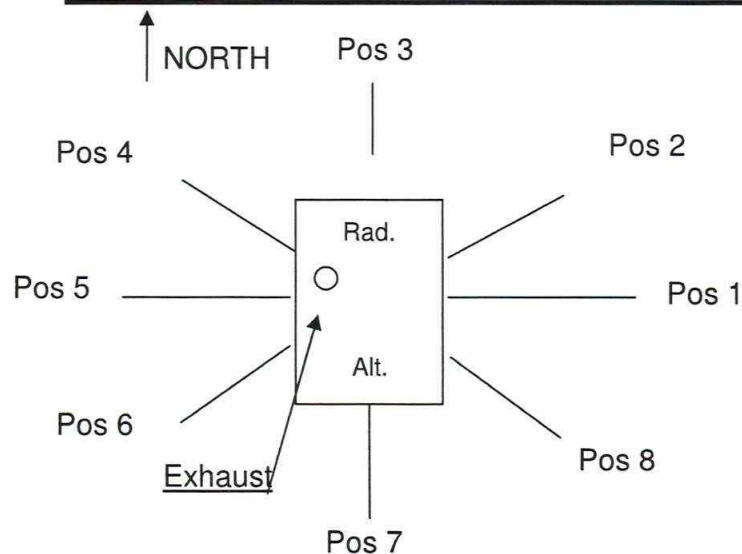
NOTE: Tested in accordance with AHRI Standard 270-08 (not listed in AHRI).

CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

UNIT SIZE-VOLTAGE, SERIES	REQUIRED SUBCOOLING °F (°C)
018-31	12 (6.7)
024-32	12 (6.7)
030-31	12 (6.7)
036-31	12 (6.7)
048-32	12 (6.7)
060-32	12 (6.7)

GENERATOR TEST RECORD

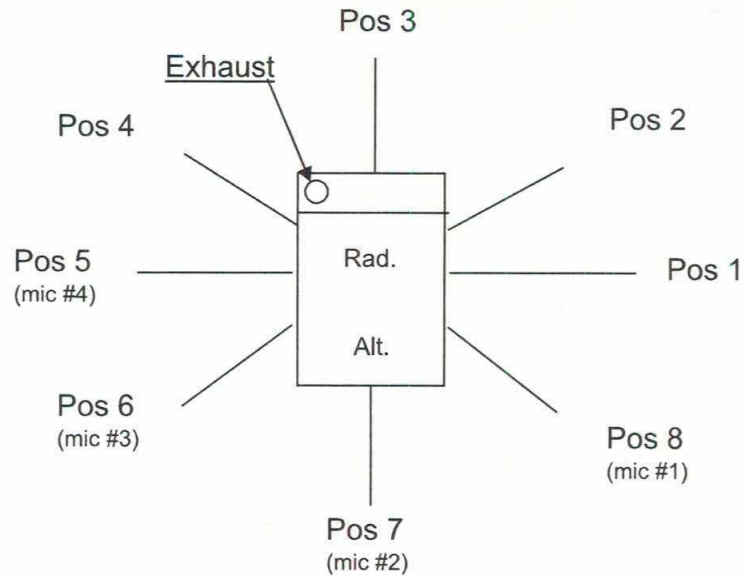
Type Of Test:	Sound test	"	Test No.	30REOZJC-14	Sheet Number	4 of 4
		"	Work Reqt. No.	6300	Observer	LVG
		"	Model	30REOZJC	Date	7/28/2008
		"	Generator Type	4P5	Serial No.	2183470
		"	Controller No.	DEC 3+	Spec No.	GM57153-ENG5
		"		16 Lite	Ambient	



Loads are in kW			
Position	Load	Load	Load
	Amb	NL	30
1	49.2	79.5	78.9
2	49.6	80.4	80.3
3	51.5	81.2	80.4
4	51.6	81.4	81.1
5	49.1	78.6	78.7
6	49.2	76.2	77.1
7	49.4	80.2	81.3
8	48.8	79.6	80.5
Average	49.8	79.6	79.8
Log Addition	59.0	88.9	89.0
Log Average	49.9	79.9	80.0

GENERATOR TEST RECORD

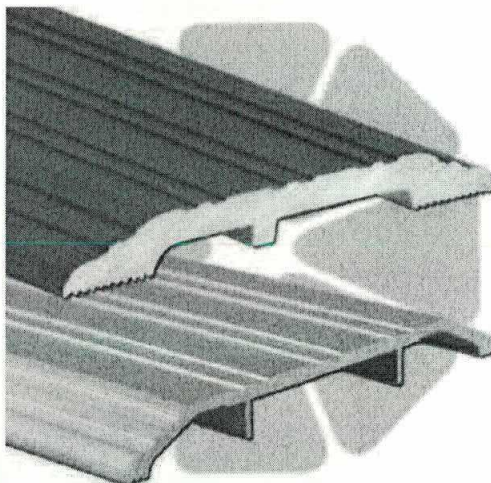
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	8 points, 7 meters from PROFILE.	Model	30REOZJC	Date	2/1/2008
	"	Generator Type		Serial No.	2177815
	"	Controller No.		Spec No.	GM67153-ENG
	"				



Loads are in kW

Position	Load NL	Load 30 KW
1	62.1	64.3
2	61.2	65.9
3	61.6	65.7
4	62.0	67.0
5	61.7	65.0
6	61.9	63.5
7	60.6	65.3
8	61.5	65.7
Average	61.6	65.3
Log Addition	70.6	74.4
Log Average	61.6	65.4

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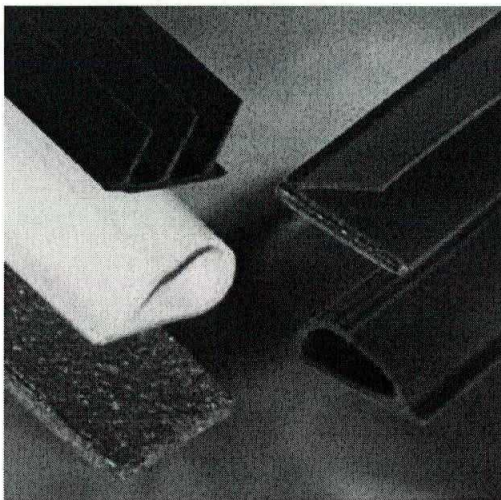


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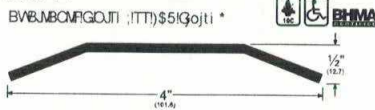
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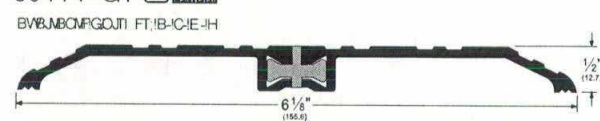
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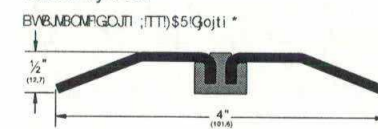


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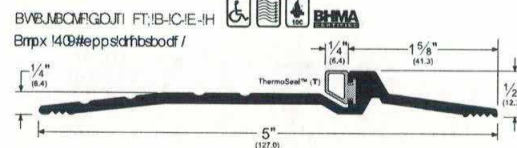
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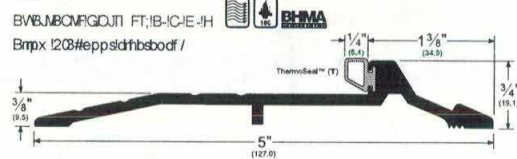
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3116 U



28 U



BMF SOBU,DTFSUT

3116 Q

28 Q

3116 W

28 W

pile (P)

vinyl (V)

I PTQJUBMUZ!QSPEVDUT!

Wjozrh!Ui sfti præt

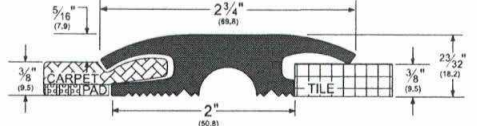
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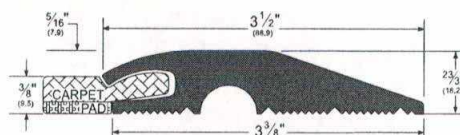
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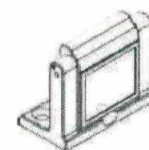
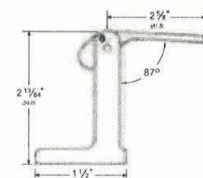


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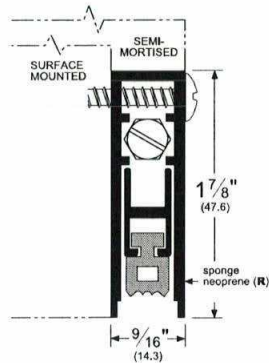
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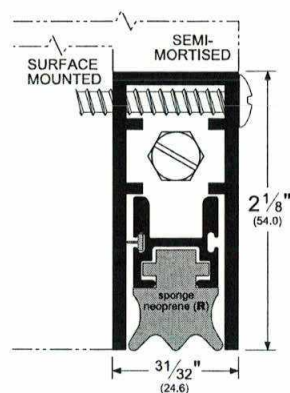
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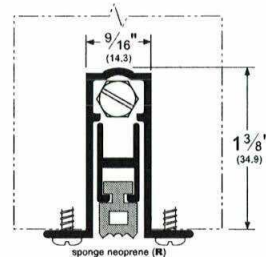
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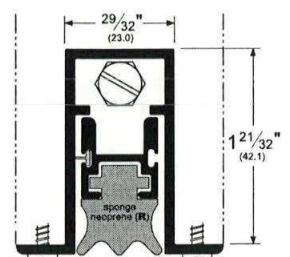
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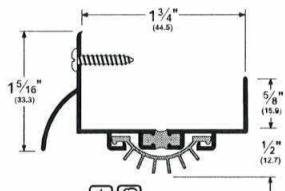
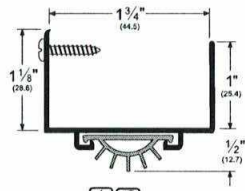
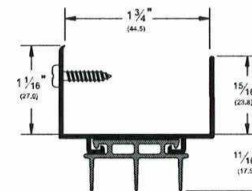
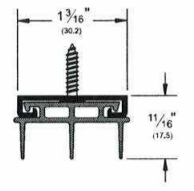


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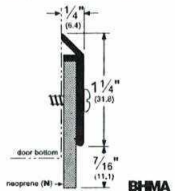
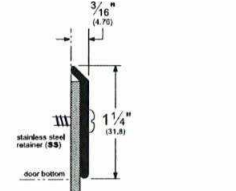
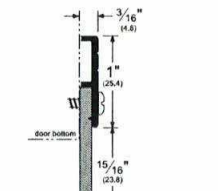
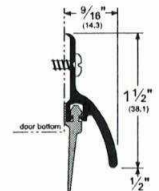
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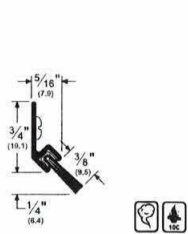
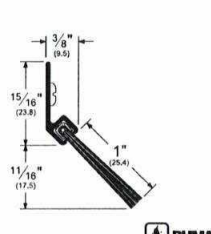
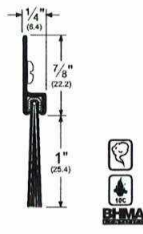
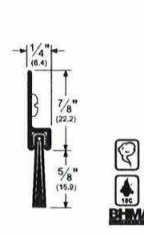
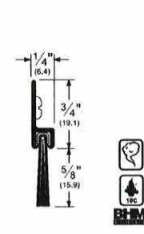
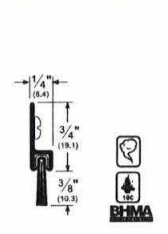
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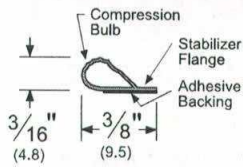
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D-IE-IH456` OC
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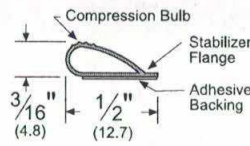
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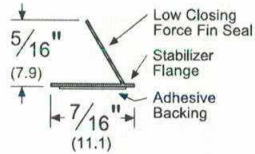
BEI FTJWF!HBTLFUJOH



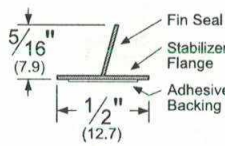
QL 44`
BVBUNBOMFGOUTI FT;
CMIE-JX
BVBUNBOMFOMHU T;!
28I-29I-31I-32I-36I-4621I



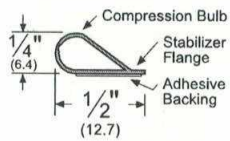
QL 66`
BVBUNBOMFGOUTI FT;
CMIE-JX
BVBUNBOMFOMHU T;
28I-29I-31I-32I-36I-4621I



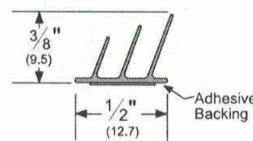
T 55`
BVBUNBOMFGOUTI FT;
CMIE-JX
BVBUNBOMFOMHU T;!
28I-29I-31I-32I-36I-4621I



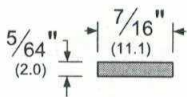
T 88`
BVBUNBOMFGOUTI FT;
DIE-JX
BVBUNBOMFOMHU T;!
128I-29I-31I-32I-36I



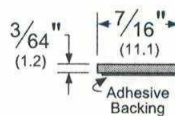
T 99`
BVBUNBOMFGOUTI FT;
CMID-E-IHS-ILBO-X
BVBUNBOMFOMHU T;!
28I-29I-31I-32I-36I-44I-41I-43I-45I-4621I



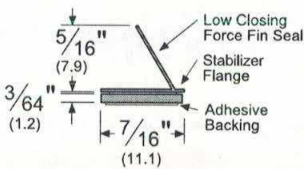
T 884`
BVBUNBOMFGOUTI FT;IE-JX
BVBUNBOMFOMHU T;28I-29I-31I-32I-36I



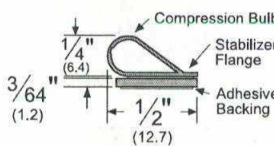
I TT 2111`
BVBUNBOMFGOUTI FT;
Hsbqi juf !op!dpef *-X
BVBUNBOMFOMHU T;!
8I-9I-12I-29I-32I-35I



I TT 3111`
BVBUNBOMFGOUTI FT;
Hsbqi juf !op!dpef *-X
BVBUNBOMFOMHU T;!
8I-9I-12I-29I-32I-35I



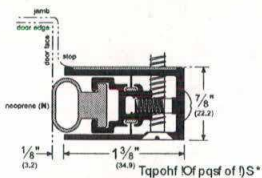
I TT 3111yT 55`
BVBUNBOMFGOUTI FT;
CMIE-JX
BVBUNBOMFOMHU T;!
29I-31I-32I-43I



I TT 3111yT 99`
BVBUNBOMFGOUTI FT;
CMID-E-IHS-ILBO-X
BVBUNBOMFOMHU T;!
29I-31I-32I-35I

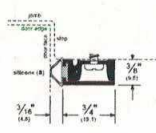
QFSJN FUFSlHBTLFUJOH

Bekvt ubcrn!Kbn c!
X f bui f st usjq



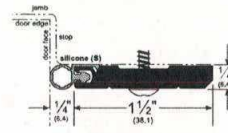
433` TO`
BVBUNBOMFGOUTI FT;DIE-IH

Tobq!Dpwf sl.
Dpodf brne!Gbt uf of st



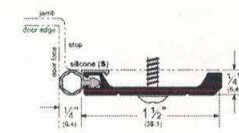
3: 421` T`
BVBUNBOMFGOUTI FT;DIE-IH
BEEJJPOBMDTFSUT;IQL-IV

I f bwz!Evuz. I f be!Tf dujpo



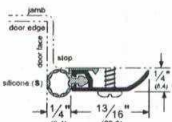
39: 2` T`
BVBUNBOMFGOUTI FT;BIE-IH
BEEJJPOBMDTFSUT;IQL-IV

I f bwz!Evuz. Tuboebse!Kbn c

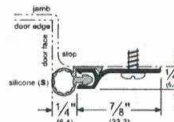


3: 1` T`
BVBUNBOMFGOUTI FT;BIE-IH
BEEJJPOBMDTFSUT;IQL-IV

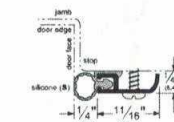
Tuboebse!Qf sijn f uf s!Hbt I f ujoH



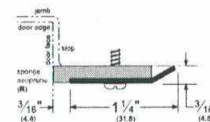
3: 8` T`
BVBUNBOMFGOUTI FT;BIE-IH-IE-IH-IX-IT
BEEJJPOBMDTFSUT;IQL-IV



414` T`
BVBUNBOMFGOUTI FT;BIE-IH-IE-IH-IX-IT
BEEJJPOBMDTFSUT;IQL-IV



427` T`
BVBUNBOMFGOUTI FT;BIE-IH-IE-IH-IX-IT
BEEJJPOBMDTFSUT;IQL-IV



426 TTS`
BVBUNBOMFGOUTI FT;IT)S5Iqo)ti`

OP UF;IBMFSOBUJOTFSUTIN BZIDBSSZIEJGFSFOUSBUOHT/ITTFIG/MNIOFIDUBMHPHIP SIX FCTJUFQPSIN P SFLQPSN BUPOI



LETTER OF AUTHORIZATION

APPLICATION FOR ZONING/LAND USE ENTITLEMENTS OR BUILDING PERMITS

Site Name: Monte Vista Buena Creek
Property Address: 1329 Sugarbush Drive, Vista, CA 92084
Assessor's Parcel Number: 181-280-07-00

I/We, Robert Lee Stuckey, owner(s) of the above described property, authorize Verizon Wireless (VZW) LLC, d/b/a Verizon Wireless, its General Partner, or their agent, to act as an agent on my/our behalf for the sole purpose of consummating any building or land-use applications necessary to ensure Verizon Wireless' ability to install an emergency generator for the purpose of operating its communications facility. I/We understand that this application may be denied, modified, or approved with conditions, and that such conditions or modifications must be complied with prior to issuance of building permits.

Signature of Property Owner(s):

Robert Lee Stuckey
Signature
ROBERT LEE STUCKEY
Print Name
10 12 2009
Date

M.K. Stuckey
Signature
MARY K. STUCKEY
Print Name
10-12-09
Date

PLEASE NOTARIZE

STATE OF CALIFORNIA)
COUNTY OF) ss

On Oct. 13 2009 before me, the undersigned, a Notary Public in and for said County and State; personally appeared Robert Lee Stuckey and Mary Kay Stuckey personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

NOTARY PUBLIC

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of San Diego

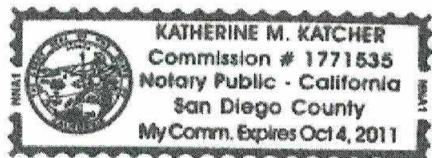
On Oct 13 2009 before me,

Here Insert Name and Title of the Officer

personally appeared

Robert Lee Shockey and Mary Kay Shockey

Name(s) of Signer(s)



who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document:

Letter of Authorization - Zoning/Building Permits

Document Date:

Number of Pages:

Signer(s) Other Than Named Above:

Capacity(ies) Claimed by Signer(s)

Signer's Name:

- ☐ Individual
☐ Corporate Officer — Title(s):
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other:

Signer Is Representing:

Signer's Name:

- ☐ Individual
☐ Corporate Officer — Title(s):
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other:

Signer Is Representing:

RIGHT THUMBPRINT
OF SIGNER
Top of thumb here

RIGHT THUMBPRINT
OF SIGNER
Top of thumb here